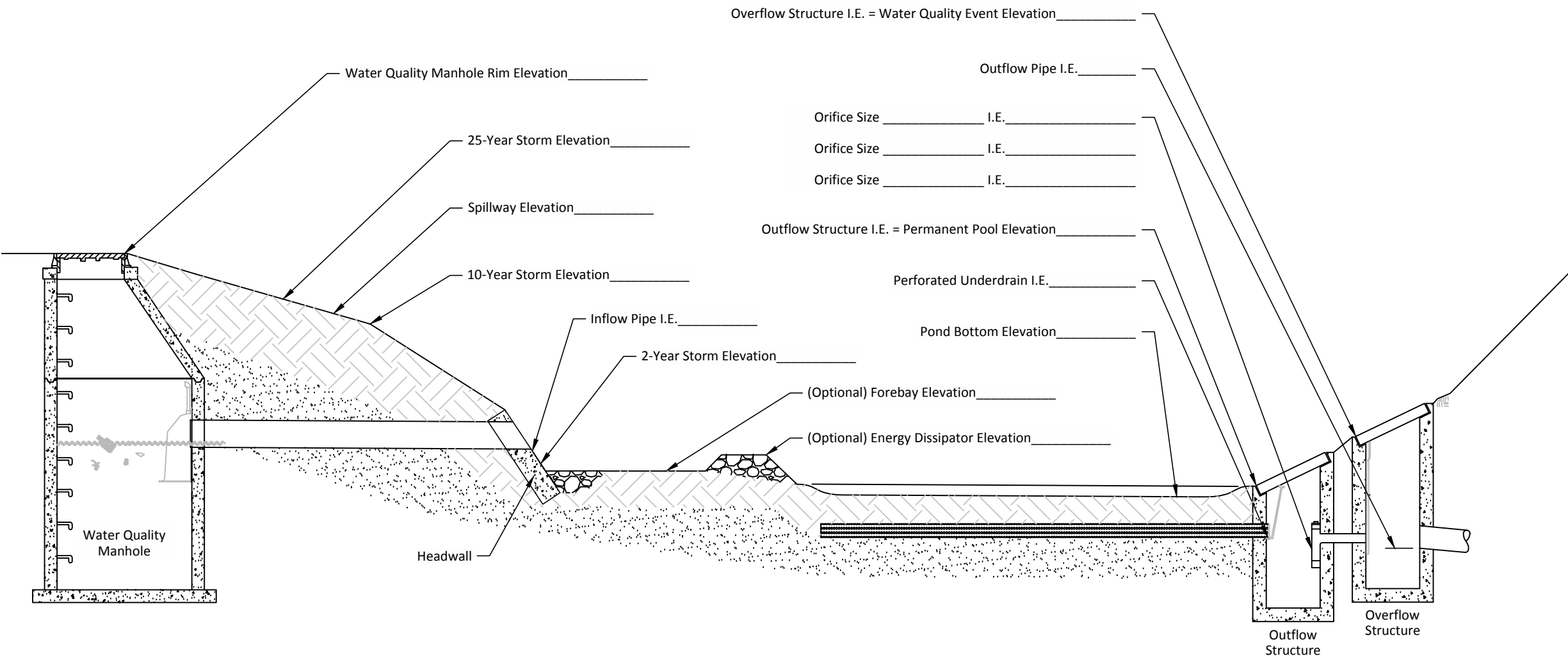


Appendix B

Standard Details

Nearest 100-Year Floodplain Elevation: _____



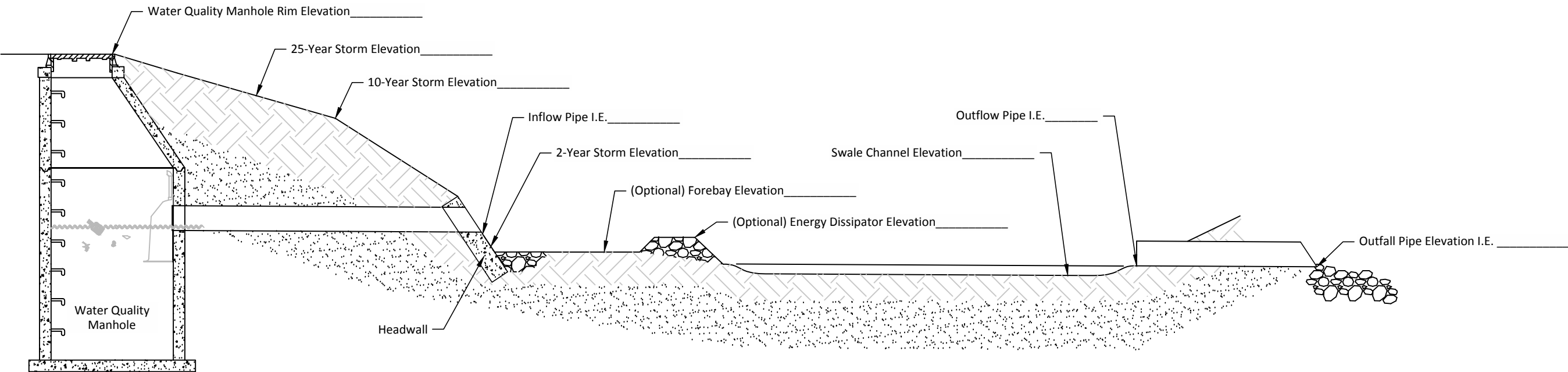
STANDARD DETAIL NO. 1
QUALITY/QUANTITY FACILITY DIAGRAM

The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.



PHONE: 503.681.6146 | FAX: 503.681.6245
150 E MAIN ST. | 4TH FLOOR | HILLSBORO, OR 97123-4089

Nearest 100-Year Floodplain Elevation: _____

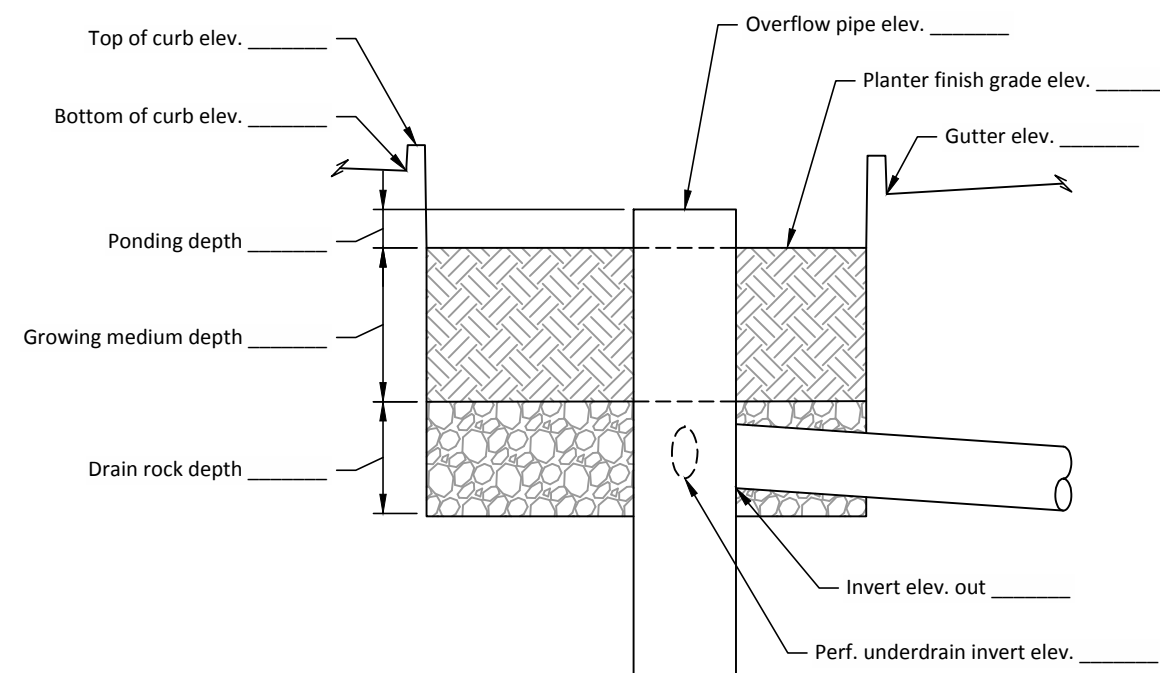


**STANDARD DETAIL NO. 2
VEGETATIVE SWALE FACILITY**

The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.





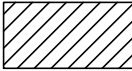
PHONE: 503.681.6146 | FAX: 503.681.6245
150 E MAIN ST. | 4TH FLOOR | HILLSBORO, OR 97123-4089



New detail



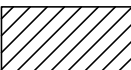
STANDARD DETAIL NO. 3 INFILTRATION PLANTER

The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

WATER QUALITY PLANTING TABLE										
	 Water Quality Swale (Swale Bottom Area) XXX sq. ft.		Min. Species Composition	Plant Category	Water Requirements	Light Requirements	Min. Rooting Size	Min. Plant Height (1" Dia.)	On Center/ Seedling Rate	Spacing Format
	Plant Communities									
	Scientific name (Common name)									
Herbaceous	Xxxx (Xxxx)		##	Herb	Moist	Part	Plug	6"	6/sq. ft.	Mass
	Xxxx (Xxxx)		##	Herb	Moist	Part	Plug	4"	6/sq. ft.	Mass
	Xxxx (Xxxx)		##	Herb	Wet	Sun	Plug	6"	6/sq. ft.	Mass
	Xxxx (Xxxx)		##	Herb	Moist	Sun	Plug	6"	6/sq. ft.	Mass
	Total Plants		##							
	 Mid-slope (Freeboard Area) XXX sq. ft.		Min. Species Composition	Plant Category	Water Requirements	Light Requirements	Min. Rooting Size	Min. Plant Height (1" Dia.)	On Center/ Seedling Rate	Spacing Format
	Plant Communities									
	Scientific name (Common name)									
Shrubs	Xxxx (Xxxx)		##	Shrub	Dry/Moist	Part	2 gal.	2'	4-5'	Single
	Xxxx (Xxxx)		##	Shrub	Moist	Part	2 gal.	2'	6'	Single
	Xxxx (Xxxx)		##	Shrub	Wet	Sun	2 gal.	2'	3-4'	Cluster
	Xxxx (Xxxx)		##	Shrub	Moist	Sun	2 gal.	2'	9'	Cluster
	Total Shrubs		##							
	 Up-land Slope XXX sq. ft.		Min. Species Composition	Plant Category	Water Requirements	Light Requirements	Min. Rooting Size	Min. Plant Height (1" Dia.)	On Center/ Seedling Rate	Spacing Format
	Plant Communities									
	Scientific name (Common name)									
Trees	Xxxx (Xxxx)		##	Tree	Dry/Moist	Part	2 gal.	2'	4-5'	Single
	Xxxx (Xxxx)		##	Tree	Moist	Part	2 gal.	2'	6'	Single
	Xxxx (Xxxx)		##	Tree	Wet	Sun	2 gal.	2'	3-4'	Cluster
	Xxxx (Xxxx)		##	Tree	Moist	Sun	2 gal.	2'	9'	Cluster
	Total Trees		##							
Shrubs	Xxxx (Xxxx)		##	Shrub	Dry/Moist	Part	2 gal.	2'	4-5'	Single
	Xxxx (Xxxx)		##	Shrub	Moist	Part	2 gal.	2'	6'	Single
	Xxxx (Xxxx)		##	Shrub	Wet	Sun	2 gal.	2'	3-4'	Cluster
	Xxxx (Xxxx)		##	Shrub	Moist	Sun	2 gal.	2'	9'	Cluster
	Total Shrubs		##							
<ul style="list-style-type: none">• Tree spacing = sq. footage X 0.01; Shrub spacing = sq. footage X 0.05; Groundcover = 100% area cover• Single = distribute throughout planting area.• Cluster = group 3 to 7 plants in same area with herb or grass in between.• Mass = plant densely to form a single stand of that species in a given area.										

Water Quality Planting General Notes

1. All invasive, non-native or noxious plant material is to be removed. Methods for removal and control of invasive/non-native and/or noxious plants are to follow strategies as outlined within the *CWS IVAM Guidance* manual. The subject site is to employ manual/mechanical management strategies and pesticide management strategies throughout maintenance period or until healthy stand of desirable vegetation is established.
2. Preserve site's existing native vegetation to the maximum extent practicable. Every effort shall be made to protect a site's existing native vegetation. Native vegetation along Sensitive Areas and Vegetated Corridors shall be retained to the maximum extent practicable
3. Replanting/Enhancement as follows:
 - Refer to plant table and plan for plant species, location, distribution, quantities, size, condition and requirements.
 - A native seed mix has been specified for the buffer area only. All plants to be pit planted with additional organic matter if required but no traditional fertilizer is necessary. Plant placement shall be consistent with the form of the naturally occurring plant community. Shrubs shall be placed in singles or clusters of the same species to provide a natural planting scheme.
4. Plant installation requirements. The Contractor is responsible for installation of site planting as specified. All trees and shrubs planted in the upland area are to be mulched a minimum of three inches in depth and 18 inches in diameter. Appropriate mulches include those made from composted leaves or bark that have not been chemically treated. Temporary irrigation will be provided and used during the two year maintenance period.
5. Monitoring and maintenance. Contractor is responsible for monitoring and maintaining the site. All new plant material is to be tagged. The removal of non-native, invasive weeds is necessary throughout the two year maintenance period, or until a healthy stand of desirable vegetation is established. The site is to be monitored a min. of 4 times per year, or 3 times per growing season. If at any time the landscaping falls below the 80% survival level, the Contractor shall reinstall all deficient planting at the next appropriate opportunity and the two year maintenance period shall begin again from the date of the replanting.
6. Contractor is required to provide and install a temporary irrigation system to maintain vegetative corridor plant establishment during the monitoring and maintenance period. The irrigation system will be fed from a City-owned meter and shall be designed to not exceed site available GPM and PSI. Refer to irrigation industry best practices and standards for acceptable design/build practices. Contractor to provide irrigation as-built record drawing upon completion and acceptance of irrigation system.
7. Plant timing. Containerized stock shall be installed only from February 1 through May 1 and October 1 through November 15. Bare root stock shall be installed only from December 15 through April 15. Plantings outside these times may require additional measures to ensure survival which shall be specified on the plans.

WATER QUALITY PLANTING RATE CALCULATION							
Plant Community	Plant Type	Planting Area (sq. ft.)		Planting Density (# per sq. ft.)		Number of Plants	Number of Species
 Water Quality Swale (Swale Bottom Area) XXX sq. ft.	Herb	###	X	###	=	###	###
 Mid-slope (Freeboard Area) XXX sq. ft.	Shrubs	###	X	###	=	###	###
 Up-land Slope XXX sq. ft.	Trees	###	X	###	=	###	###

Revised detail number

STANDARD DETAIL NO. 4
WATER QUALITY PLANTING INFORMATION

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